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# Intelligence Report

Trends in Soviet Military Manpower

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CENTRAL INTELLIGENCE AGENCY Directorate of Intelligence October 1972

INTELLIGENCE REPORT

### Trends in Soviet Military Manpower

### Introduction

This report traces the growth in Soviet military manpower over the past decade and examines changes that have occurred in the allocations of manpower to the various military missions—strategic attack, strategic defense, general purpose forces, command and general support, and militarized security forces. While the study focuses on the period 1961-1971, the manpower implications of ongoing Soviet military programs are also examined briefly to chart expected trends over the next few years.

Manpower and money are two common denominators available that can be used to examine magnitudes and trends in the total Soviet defense effort. Manpower estimates, like estimates of military spending, do not provide a basis for firm judgments about military capabilities, but do provide insights into the size and development of the overall Soviet military effort as well as the changing emphasis over time on the various parts of that effort.

The Soviets do not normally release explicit information on military manpower levels—such information is classified a state secret. The manpower estimates in this report are derived from the

Note: This report was prepared by the Office of Strategic Research and coordinated within CIA.



order-of-battle and manning information on Soviet forces that is available to the intelligence community. The estimates, however, are checked for consistency with published Soviet demographic and labor force statistics.

This report also presents a comparison of Soviet and US force levels and expenditures for military personnel for the period 1961-1971.



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#### Summary

Total Soviet military manpower increased from 2.8 million men in 1961 to 3.7 million in 1971 as Soviet concern over growing Sino-Soviet tensions and US strategic capabilities increased.\* During the period, Soviet general purpose forces grew by about 345,000 men, the largest increase of any component. Strategic attack forces have added an estimated 230,000 men and another 160,000 have augmented strategic defense forces. Command and general support manpower has increased by almost 160,000.

Within the general purpose forces, the ground troops element accounted for most of the increase-about 275,000 men. Frontal (tactical) aviation, naval submarine and air forces, and military transport aviation (VTA) accounted for the remaining 70,000-man increase.

The factor having the greatest influence on the general purpose forces manpower increase was the Sino-Soviet split. Starting in early 1965, the Soviets moved from a posture of increased border surveillance to one of a large-scale troop buildup.

Another factor in the ground troops increase was a change in the Soviet concept of war with NATO. This doctrine changed in the Sixties to include the possibility of a period of conventional warfare requiring considerable combat and logistical support prior to nuclear hostilities.

Since 1961 strategic attack manpower has nearly tripled--the fastest rate of growth of any of the Soviet forces. At the start of the Sixties, it numbered

<sup>\*</sup> This report covers uniformed military personnel only. It does not include civilians employed in the Soviet defense establishment.

about 135,000 men, nearly all of whom were associated with the bomber, MRBM, and IRBM forces. Only a few men were assigned to the token ICBM force existing at the time. About 5,000 men supported the ballistic missile submarine force. By 1971, strategic attack personnel numbered about 365,000, of which nearly 215,000--almost 60 percent of the total--were assigned to operate and maintain the 1,375 ICBM launchers then in the inventory. Manpower associated with medium bombers had declined by about one-third, while manpower associated with heavy bombers remained about the same. The peripheral missile force was about 86,000 men, a drop of some 11,000 men from the peak size of this force Personnel associated with ballistic missile submarines in 1971 numbered nearly 11,000, a little over twice the 1961 number.

Strategic defense manpower increased from about 345,000 in 1961 to some 505,000 in 1971. Within this mission, the emphasis changed from aircraft to surface-to-air missiles as the prime defensive weapon, although interceptor aircraft remained an important element. SAM personnel rose from about 140,000 in 1961 to some 310,000 in 1971, while aircraft personnel declined by about 30,000 to about 95,000 in 1971. ABM deployment began in 1967, and by 1971 about 13,000 men were assigned to this program. Control and warning personnel are believed to have remained between 85,000 and 95,000 throughout the period.

Command and general support manpower increased by about 35 percent during the period 1961-1971, increasing from about 450,000 to nearly 610,000. This is a result of the Soviet effort to upgrade the logistical capabilities of the forces. During the same period, militarized security forces, of which 90 percent are border guards, are believed to have remained unchanged at about 225,000 men.

Soviet active military manpower is expected to increase by less than 50,000 in 1972. The filling out of units along the Sino-Soviet border will account for most of this increase. Through the mid-Seventies, total Soviet active military manpower is expected to remain relatively unchanged, but some structural shifts may take place if manpower-intensive strategic systems are replaced by more modern systems and if additional ground force personnel are stationed along the China border.

During the early Seventies, the Soviets should have a sufficient pool of draft-age males for military service. The problem of most immediate concern to the Soviets is the acquisition and retention of skilled technicians necessary to train new conscripts and operate and maintain the complex military hardware currently in use. The Universal Military Service Law of 1967 restricts the length of time during which a scientist or technician is required to serve in the military. Premilitary training, designed to prepare a recruit to take his place in a unit as a qualified apprentice, has not produced the desired results owing to lack of adequate training facilities and qualified instructors. The latest attempt to keep qualified personnel in the service has taken the form of monetary and status inducements.

While Soviet military manpower grew steadily over the period 1961-1971, US military manpower fluctuated. From a low of 2.5 million in 1961, US military manpower rose to a peak of 3.5 million during the height of the Vietnam conflict. At the end of 1971 it was down to about 2.7 million men.

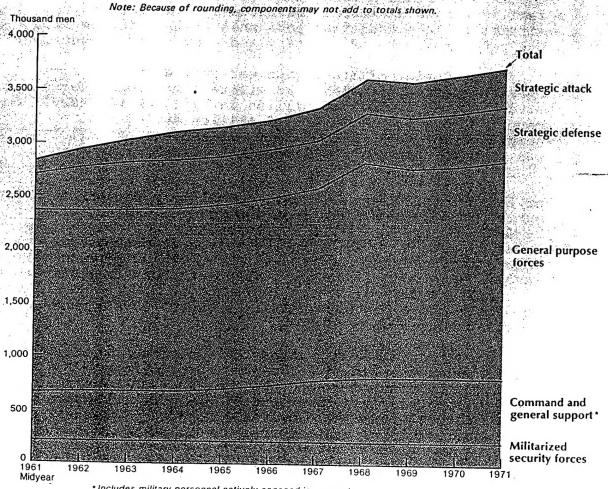
Both the US and the USSR spend a sizable portion of their total defense outlays on military personnel. During 1961-1971 total military personnel expenditures by each country-measured in its own currency--averaged about 30 percent. While Soviet personnel outlays remained throughout the period at about the 30 percent level, US personnel outlays started at about 31 percent in 1961, fluctuated through 1967, and then rose steadily to a peak of 36 percent in 1971 as the US moved towards an all-volunteer army.

The differential pay rates for officers in both the US and Soviet armed forces are surprisingly similar. Colonels get about half as much as generals in both countries and lieutenants about 20 percent as much. For enlisted men, however, the Soviet soldier is far below his US counterpart. A US recruit's base pay is about 13 percent of that of a general, whereas his Soviet counterpart gets only 1 percent. In relation to his potential civilian earnings, the US recruit makes over a third of the average US wage. The Soviet conscript's base pay is less than 5 percent of the average wage in the USSR.



### Estimated Soviet Military Manpower by Mission, 1961-1971

	Table 1							7	housand men	
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970 1971
Strategic attack	133	174	212	263	274	272	298	322	334	353 363
Strategic defense General purpose	343	415	444	458	453	453	449	452	475	
forces Command and	1,692	1,679	1,694	1,706	1,717	1,754	1,795	2,016	1,948	1,980 2,036
general support* Militarized security	452	465	465	465			578	603	608	608 608
forces	225	225	225	225	225	225	225	225	225	225 225
Total			3,040	3,116	3,162	3,229	3,345	3,618	3,590	3,658 3,735



 Includes military personnel actively engaged in research, development, testing, and evaluation (RDT&E).

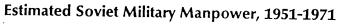
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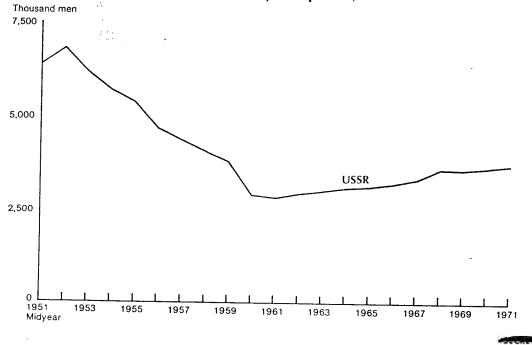


### Total Soviet Military Manpower\*

In 1961, estimated total active Soviet military manpower stood at about 2.8 million, 4 million below the 6.8 million men under arms at the height of the Korean War in 1952. Since 1961, the trend has been generally upward with estimated manpower in 1971 totaling some 3.7 million. This increase of about 900,000 men occurred in a decade during which both US and Soviet strategic capabilities grew rapidly.

The largest Soviet military manpower increase occurred in the general purpose forces where an esti-





<sup>\*</sup> This report covers uniformed military personnel only. It does not include civilians employed in the Soviet defense establishment.

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mated 345,000 men--almost 40 percent of the total manpower increase--were added during 1961-1971 (see Table 1, page 8). Because of rapidly expanding Soviet strategic forces during this period, however, the general purpose forces' share of total manpower declined from about 60 percent to about 55 percent.

The second largest manpower increase occurred in the strategic attack mission. It is estimated that the manpower for these forces almost tripled from about 135,000 men in 1961 to nearly 365,000 men in 1971. Structural changes in the mission produced a wide range of relative rates of change. The Strategic Rocket Troops, established in 1959-1960, had nearly five times as many troops in 1971 as in 1961. Ballistic missile submarine manpower doubled, whereas total manpower assigned to the bomber force declined slightly.

The strategic defense forces and the command and general support\* mission each increased by nearly 160,000 men during 1961-1971, while militarized security forces remained constant.

<sup>\*</sup> Command and general support includes those military personnel actively engaged in research, development, testing, and evaluation (RDT&E) as well as those personnel who cannot clearly be associated with a single major force component.



### Changes in Force Structure

#### General Purpose Forces

The reduction in manpower assigned to the general purpose forces that occurred during the Fifties contrasts with the growth--primarily in the ground troops element--during the Sixties. Of the increase of 345,000 men, ground troops accounted for some 275,000 (see Table 2, page 12). The remaining 70,000-man increase was spread among units of frontal (tactical) aviation, general purpose naval forces, and military transport aviation. The most important factor influencing the Soviet decision to expand general purpose forces during the Sixties was the deteriorating relations with China.

For the first few years following the Sino-Soviet split in 1960, the Soviets added only a few troops to their garrisons along the Chinese border. When the buildup began in 1965 the Soviets had some 14 low-strength divisions opposite China. By the end of 1968 there were at least 33 divisions (most of which were under strength) along the Chinese border and in Mongolia. All told, the Soviets have added between 225,000 and 300,000 men to their forces in the ground mission opposite China.

Another factor which influenced the buildup of Soviet ground troops was a change in the Soviet concept of how a war with NATO might be fought. In the Sixties, Soviet strategists began to discuss the possibility that conventional warfare could precede general nuclear war in central Europe. This revision of war doctrine called for modifications to the ground forces. The Soviets, therefore, began to strengthen their ground force supporting units, particularly artillery units which would be needed to break through NATO defenses during the nonnuclear phase of war.

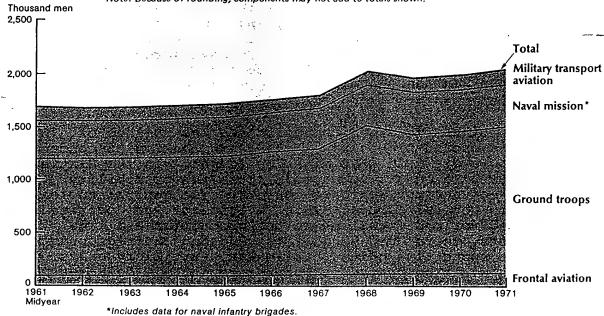
Frontal aviation manpower grew relatively slowly from 1961 through 1965, but as the buildup on the Sino-Soviet border continued, this force expanded rapidly after 1965. The total number of combat air-



### Estimated Soviet General Purpose Forces Manpower, 1961-1971

	Table 2							Thousand men				
	19	51	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Military transport aviation	- 1:	28	128	130	127	123	120	119	123	126	130	137
Naval mission Surface ships Submarines Naval aviation Joint support*	2	7 26 4 22	346 209 37 25 76	353 207 39 29 78	359 207 40 32 81	366 208 42 33 83	367 209 43 35 80	375 214 44 36 80	382 216 43 39 82	392 224 44 41 82	392 224 42 43 82	394 228 41 43 82
Ground mission Ground troops Frontal aviation	1,11		•	•	•	•	•	•	•		1,458 1,332 126	•
Total	1,69	2.1	,679	1,694	1,706	1,717	1,754	1,795	2,016	1,948	1,980	2,036

Note: Because of rounding, components may not add to totals shown.



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craft grew from about 3,300 in 1965 to around 3,900 in 1971, while the number on the China border increased by over 800 aircraft. A total of some 25,000 men has been added to frontal aviation since 1961.

General purpose naval forces showed an increase of about 37,000 men during 1961-1971 as the force was strengthened by additional guided missile cruisers and destroyers, cruise missile submarines, bombers, and reconnaissance aircraft. The largest share of this increase—about 21,000 men—took place in naval aviation where some 450 aircraft were added. The total number of minor surface combatants in the Soviet navy declined during the period, but the number of major surface combatants with their larger crews increased so that no significant change occurred in the total manpower level for surface ships.

The number of Soviet general purpose submarines declined from 326 in 1961 to 287 in 1971. Because of the larger crews in the more modern submarines, however, manpower associated with the general purpose submarine fleet increased during the period from 34,000 to 41,000.

Between 1961 and 1971, the number of personnel assigned to naval infantry brigades increased by an estimated 6,000 men. This brought the force to some 12,000.

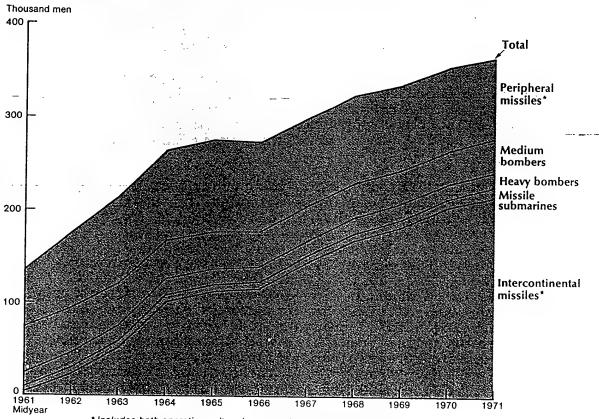
During the period 1961-1971, military transport aviation (VTA) manpower increased by about 9,000 as the force changed from one composed almost entirely of light and extra-light transport aircraft capable of carrying 5 to 25 troops to one with a substantial number of medium transports with an average capacity of 100 men. VTA is just beginning to build up a force of heavy transports. These aircraft are able to carry 200 to 400 men each. The size of the helicopter fleet has steadily increased—in 1961 the Soviets had 1,350 helicopters in the VTA and by 1971 the number was up to 2,560.



### Estimated Soviet Strategic Attack Manpower, 1961-1971

	Table 3							т			Thousand men		
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971		
Peripheral missiles* Medium bombers Heavy bombers Missile submarines	50 15 5	81 48 16 7	93 46 17 7	96 42 17 7	97 40 17 7	96 38 17 7	94 37 17 7	94 37 17	91 36 17 8	89 36 16 9	86 36 16		
Intercontinental mis	siles* 3	<sup>;</sup> 22	50	101	112	115	143	168	182	203	214		
Total	133	174	212	263	274	272	298	322	334	353	<b>3</b> 63		

Note: Because of rounding, components may not add to totals shown.



\* Includes both operating unit and command and support personnel.

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### Strategic Attack

Since 1961 the number of men in the Soviet strategic attack forces has grown rapidly. A number of major changes in force organization and mission have accompanied the increase in manning. In 1961, Soviet strategic attack forces were concentrated on peripheral strike missions and accounted for about 5 percent of total military manpower. By 1971, the force had an intercontinental attack capability comparable to that of the US and accounted for 10 percent of total Soviet military manpower.

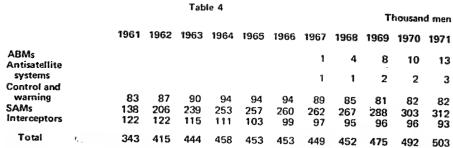
The strategic attack mission included approximately 135,000 men in 1961, 61,000 of whom were associated with the 380 MRBM and IRBM launchers deployed and another 50,000 with the nearly 1,000 medium bombers in operation (see Table 3, at left). Some 15,000 men were assigned to the Soviet heavy bomber force—then consisting of 180 bombers. The token force of 4 SS-6 ICBM launchers required about 3,000 men to operate and maintain. Finally, the small ballistic missile submarine fleet included some 5,000 men.

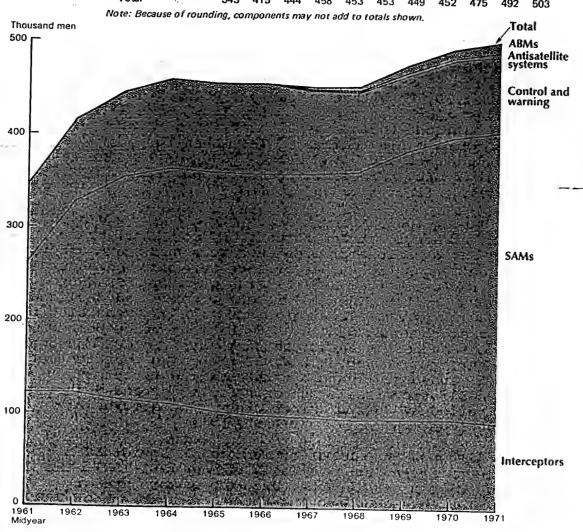
During the Sixties the Soviets greatly expanded their strategic attack forces. By mid-1971, their land-based peripheral missile forces numbered some 86,000 men as the number of launchers reached about 715 (including the SS-11s in the western USSR MRBM and IRBM belt). The medium bomber force had declined by 280 aircraft, allowing a reduction of associated manpower to about 36,000, and the long-range bomber force remained at about the same level. ICBM manpower, however, grew to about 214,000 troops to operate the 1,375 land-based launchers then in the inventory. The ballistic missile submarine fleet expanded during the period by 36 submarines, requiring a force of 11,000 men.

Although the number of men in the Soviet ICBM force increased substantially during 1961-1971, the ratio of men per launcher dropped as more modern missiles were added to the force. It took about 725 men in 1961 to support each SS-6 launcher. This figure includes men both at the launch site and at command and support complexes. In the mid-Sixties, with the



### Estimated Soviet Strategic Defense Manpower, 1961-1971





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addition of SS-7 and SS-8 ICBMs, the ratio declined to about 500 men per launcher. By 1971, with the SS-9, SS-11, and SS-13 missiles in the force, the ratio had declined to 155 men per launcher. This reduction in personnel was made possible by the switch from cryogenic to storable liquid fuels and by the more easily serviced components in the later generation missiles.

The Soviet peripheral missile force was larger in 1971 than it was in 1961, but the peak size of this force was reached in 1965. At that time, the force numbered 97,000 men and included 576 SS-4 MRBM and 101 SS-5 IRBM launchers. By 1971, the force had been reduced to 86,000 men and included 504 SS-4s, 90 SS-5s, and 120 SS-11s.

In recent years, SS-lls have been deployed at MRBM and IRBM locations in the western USSR. In 1970, 1,000 men manned the 50 SS-ll launchers at these locations. In 1971 there were 120 launchers and about 2,400 men in this role. These figures result in a ratio of 20 men per launcher, and if additional SS-4 and SS-5 silos are deactivated and replaced with SS-lls, the ratio of men per launcher for the total peripheral missile force will fall further.

The Soviets did not add any new types of aircraft to their long-range bomber force during 1961-1971, and the number of men in the force remained in direct proportion to the number of aircraft. If the Soviets replace some of their current bombers with more sophisticated ones requiring more personnel per aircraft for operations and maintenance, total aircraft manpower will go up even if the number of aircraft remains relatively constant.

### Strategic Defense

For Soviet strategic defense forces, the 1961-1971 period was one of overall growth in manpower as the composition of the force gradually shifted from manned interceptors to missiles (see Table 4, at left). At the beginning of the period the Soviets had almost

4,750 interceptor aircraft in operation and only 428 surface-to-air missile sites. By 1971 the interceptor total had fallen to just over 3,200 aircraft and the SAM force increased to 1,231 sites. In addition, by 1967 the Soviets had begun deployment of an antiballistic missile system.

The decline of about 1,550 operational interceptors during the 1961-1971 period enabled associated manpower to be reduced. The inventory of MIG-15 Fagots and MIG-17 Frescos was reduced from 3,350 aircraft requiring a supporting force of nearly 85,000 men in 1961, to 900 aircraft and 22,000 men in 1971. At the same time new aircraft such as the Firebar and Fiddler and later the advanced Flagon and Foxbat interceptors required some 33,000 additional personnel for a net decrease in interceptor-related manpower of about 30,000 men. Because these newer aircraft contain more sophisticated electronics and armaments, the average number of men required to operate and maintain an aircraft has increased.

Although the Soviets have been involved in the research and development phase of an antiballistic missile force since the mid-Fifties, it was not until 1967 that the first major item of equipment was deployed. In that year, 1,000 men were assigned to two Hen House missile detection radar sites. By 1971, ABM-associated manpower had grown to nearly 13,000, over half of which was assigned to the 64 Galosh launch sites around Moscow.

Little is known of the Soviet antisatellite effort. A good deal of testing of antisatellite systems has taken place, but the extent of operational deployment is presently conjectural. Operational deployment began in 1967 with two large satellite-tracking radars manned by about 1,000 men. By 1971, the force had grown to an estimated six radars and 3,000 men. Because the antisatellite missile launchers for the force have not yet been identified, this estimate does not include any manning for such launchers.



### Command and General Support

The personnel in the command and general support mission are those who have not been identified with any single force component. Soviet command and general support manpower is estimated at about 450,000 in 1961. By 1971 the force had grown to about 610,000—a 35 percent increase—as training establishments and central signal, supply, medical, transport, and construction services for the military were expanded (see Table 5, below).

Table 5

### Estimated Soviet Command and General Support and Militarized Security Forces Manpower, 1961-1971

Thousand men 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 Command and general support\* Militarized security forces Total 718 750 Note: Because of rounding, components may not add to totals shown.

### Militarized Security Forces

In addition to the personnel in Soviet ground, naval, and air units, there are some 225,000 militarized security troops, most of whom are border guards. These troops—mainly conscripts—maintain border security and perform special guard functions. The size of the force has apparently remained relatively stable since 1961.

<sup>\*</sup>Includes military personnel actively engaged in research, development, testing, and evaluation



### Manpower Prospects for the Early Seventies

### Military Requirements

Analysis of ongoing Soviet military programs indicates that this year's total Soviet active military manpower has increased by less than 50,000 over 1971. Nearly all of this increase will be in the general purpose ground forces as the filling out of units in the areas adjacent to China continues. Manpower for strategic attack and strategic defense forces is expected to show only a slight increase as a result of some additional ballistic missile systems activated during the year and the continuing deployment of the SA-5.

The number of people on active military duty in the USSR will probably remain relatively unchanged through the mid-Seventies although a number of structural changes within the armed forces are If deployment of forces to the Sinoexpected. Soviet border continues at the expected rate over the next few years, it could add another 100,000 men to Soviet forces in the ground mission. The deactivation of the relatively manpower-intensive SS-4s, SS-7s, and SS-8s through the mid-Seventies, on the other hand, could reduce strategic attack manpower by 70,000. Also, phaseout of older model aircraft and surface-to-air missiles could reduce strategic defense manpower by about 30,000 in the same period.

### Manpower Availability

An adequate supply of draft-age males will most likely fill most of the needs of the military service in the early Seventies. During the period 1961-1971, total Soviet population increased by about 12 percent while the population of 18-year-old males more than doubled. In 1971 there were over 2.2 million 18-year-old males subject to conscription under the terms of the Soviet Universal Military Service Law of October 1967. By 1975, this figure is expected to be about 2.5 million.

Despite this pool of eligible manpower, the law has made it more difficult for the military services to get and retain skilled technicians.\* One provision of the law restricts the length of time a scientist or technician is required to serve to two to three years if called up as an officer and to one year if inducted as an enlisted man. Under the old law, the time of service was indefinite.

Another provision of the 1967 law reduces the time of obligatory service by one year. This has reduced the training time available for conscripts to learn to operate and maintain the increasingly complex inventory of military equipment in the Soviet armed forces. The new terms of service are two years for all forces except personnel in naval seagoing and combat support units and seagoing border guards, who must serve three years.

### Adequacy

One of the provisions of the Universal Military Service Law calls for premilitary training in basic military skills. Training usually begins at age 15 or 16 and may be conducted at school or at the place of employment if the trainee is not enrolled in a secondary school. A registrant may be selected to attend specialist training courses conducted by the Voluntary Society for Assistance to the Army, Air Force, and Navy (DOSAAF) and by the vocational technical school system. The number of specialists to be trained is determined by the Council of Ministers on the basis of estimated requirements. The Soviets established the premilitary training program to prepare a recruit to take his place in a unit as a qualified apprentice, speed up the recruit training process, and permit the development of a cadre of qualified junior officers and technicians. A lack of adequate training facilities and qualified instructors plus

<sup>\*</sup> See SR IR 72-3, The 1967 Soviet Regulations on Compulsory Service in the Armed Forces, January 1972 (Confidential).

mismanagement and graft within DOSAAF all have contributed to a less than successful program.

There are indications that the Soviet military has been unable to attract an adequate number of reenlistees. These men are an essential ingredient in the Soviet military system. They provide instruction to the hundreds of thousands of conscripts who enter the military each year and they maintain the continuity of the system. Both the number and the quality of reenlisted personnel in recent years have been below those which the military feels are needed.

The Soviets have taken a number of steps to alleviate this shortage of reenlisted personnel. Recently they have replaced the old extended-service system with one designed to make a military career more attractive to potential reenlistees through increased privileges and prestige. They also may have increased reenlistment pay in an effort to attract and retain the required specialists.

#### Reserves

Terms of the Universal Military Training Law of 1967 require that all citizens eligible for military service, whether having served on active duty or not, be held on the reserve rolls until age 50. are two reserve categories -- Category I for those who have served on active duty for more than a year, and Category II for all others. Each category consists of three classes based on age. Reservists remain in the first class until they are 35, at which time they enter the second class. At age 45 they move to the third class and at age 50 they are released from the rolls. Persons in each category and class are subject to recall for refresher training courses for specified periods of time. For example, first-class enlisted reservists in Category I may be recalled to active duty up to four times for three months' duty each It is estimated, however, that few reservists have been given refresher training to the maximum time limits provided for by law. One former officer stated that he knew of no one in his area who had ever been recalled for summer training. He had heard, however, that technically trained officers in other areas were recalled for retraining in missile and rocket units.

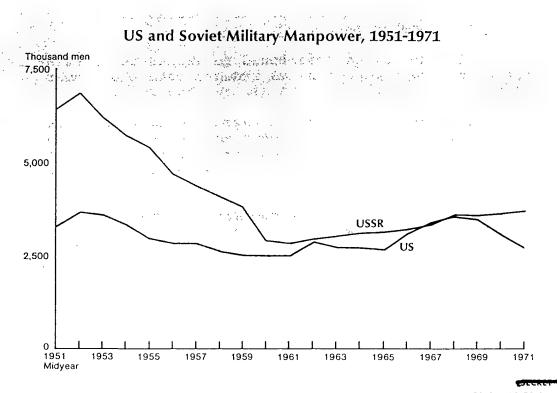


### US and Soviet Manpower Comparisons

### Size and Composition of Forces

At the height of the Korean war in 1952 when US military manpower was at its highest level since World War II, Soviet military forces outnumbered those of the US by almost 2 to 1 (see chart below). Although both forces were reduced during the next 10 years, the much more rapid Soviet decline left both countries with close to the same number of men in their armed forces in 1961--2.8 million for the Soviets and 2.5 million for the US.

The pattern of change in the two forces, however, has been quite different since 1961. As pointed out earlier, Soviet military manpower has grown relatively



steadily since 1961 with the exception of the increased callup of forces during the intervention in Czechoslovakia in 1968. In contrast, US military manpower levels since 1961 have fluctuated—an increase in 1962 during the Cuban crisis, a slight decline through 1965 as international tensions lessened, the substantial 1966—1968 buildup as the Vietnam situation intensified and US forces reached 3.5 million, and finally the decline in the period 1969—1971. At the end of 1971, Soviet military forces numbered an estimated 3.7 million men, whereas US military manpower had declined to 2.7 million.

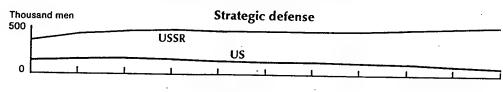
Because of the differences in how the military forces are structured in the US and USSR, detailed comparisons of changes are difficult. Nevertheless, within broad mission categories some comparisons may be made (see chart at right). Forces related to the strategic attack mission in the USSR nearly tripled during 1961-1971 as the Soviets expanded their ICBM force. On the US side, strategic attack manpower declined, primarily because of the reduction in the long-range bomber force.

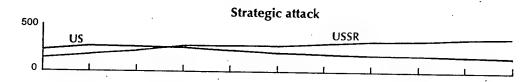
While the Soviets continued to expand their strategic defense forces, the US reduced both the number of SAMs and aircraft in the air defense role.

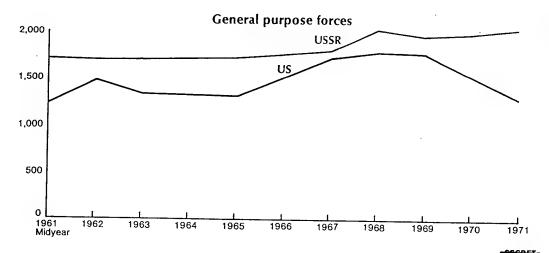
Soviet ground troops increased steadily from 1962 through 1968, declined somewhat in 1969 and increased again through 1971. US ground troop strength reached a peak in 1968, and has been decreasing steadily since then.

Within the general purpose mission, manpower levels of tactical air units, naval forces, and military transport aviation in both countries were about the same in 1961 and remained so throughout the next 10 years. Both countries have enlarged the forces associated with the broad category of command and general support. The growth has been somewhat higher in the US, mainly because of the logistics requirements of the Vietnam War.

## Comparison of US and Soviet Military Manpower by Major Mission, 1961-1971







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### Personnel Expenditures

Both the USSR and the US spend a sizable portion of their total defense outlays on military personnel in the form of pay and allowances and food.

The differential pay rates for officers in both the US and Soviet armed forces are remarkably similar (see Table 6, at right). For enlisted men, however, the percentages are substantially different. In the US, a master sergeant receives more base pay than a second lieutenant—in fact, his base pay is almost as much as a captain's and probably more when longevity pay is added. The Soviet enlisted soldier is less well—off than his US counterpart. He not only gets little pay relative to his officers, but does not do well compared with his civilian counterparts.

The base pay for a US recruit is more than one-third the average wage in the US. Fringe benefits--food, housing, clothing, medical care, recreation facilities--bring the US recruit's "real" pay much closer to the average civilian wage.

The Soviet conscript's pay of less than 50 rubles per year is only 3 percent of the average yearly wage for a Soviet worker. The few fringe benefits available to the Soviet conscript which are not available to the industrial worker do not reduce the gap by much. Even though the USSR encourages reenlistment by offering special pay and allowances, Soviet military services are made up of 75 percent conscripts (draftees) compared with only 15 percent for the US.

Throughout the 1961-1971 period, estimated annual Soviet military personnel expenditures averaged about 30 percent of total ruble outlays for defense. US outlays for military personnel also represented a relatively stable share of total dollar defense outlays for the period 1961-1968, averaging about 30 percent. Since 1968, the share of total US defense spending allocated to military personnel expenditures has risen--standing at 36 percent in 1971--as cuts in total defense spending have taken place, primarily in weapons procurement. (See chart, page 28.)



Table 6

## Base Pay for Various Military Ranks as a Percent of General's Pay in the US and USSR

(General's pay = 100)

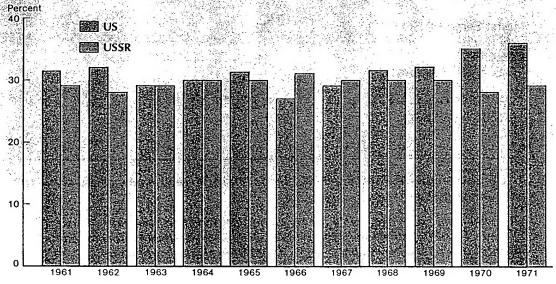
Officers	US*	USSR**
General	100	100
Colonel	49	49
Major	33	34
Captain	31	27
Second Lieutenant (USSR: Jr. Lieutenant)	23	19
Enlisted Men		
Master Sergeant .	30	14
Corporal (USSR: Jr. Sergeant)	15.	2
Recruit (USSR: Conscript)	13	1

<sup>\*</sup> US data are as of 1 January 1972 and do not reflect pay for longevity or other allowances.

<sup>\*\*</sup> Soviet data are typical rates for rank and position that have existed for many years. Although pay raises may have taken place, available information indicates that relative scales have probably not been significantly altered.

Although the US is currently spending proportionately more on military personnel than is the USSR, it does not follow -- as some Western analysts have concluded--that the USSR is consequently able to purchase more military hardware to support its personnel than can the US. Labor is cheaper relative to equipment in the USSR than is the case in the US, but the converse is also true--equipment in the USSR is relatively more expensive than in the US. In fact, the USSR must spend proportionately more than does the US out of total defense expenditures to buy the same amount of equivalent equipment. For example, one ruble equates to about 5 dollars in personnel costs. In the procurement of hardware, however, one ruble equates to only about 3½ dollars for armored vehicles, or 2 dollars for electronic equipment.

### US and Soviet Military Personnel Expenditures as a Percent of Total Defense Outlays



Note: To eliminate the effects of price changes, US data are calculated using constant dollar expenditures and Soviet data are based on constant ruble expenditures.



US military personnel expenditures have risen steadily since 1961. In that year, personnel expenditures were about 20 billion dollars in constant 1970 prices. In 1971 US military personnel expenditures in constant 1970 prices were over 25 billion dollars. The same upward trend has occurred in the USSR. In 1961, military personnel expenditures totaled about 5 billion rubles (the equivalent of 22 billion dollars). In 1971 this figure had risen to almost 6.5 billion rubles (28 billion dollars).

### Related Publications of The Office of Strategic Research

January 1972

The 1967 Soviet Regulations on Compulsory Service in the Armed Forces (C)

March 1972

Soviet Defense Spending 1963-1972 (S)